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IN THE

Supreme Court of the United States

OCTOBER TERM, 1948.

Nos. 184 and 185.

GRAVER TANK & MFG. CO., INC., THE LINCOLN ELECTRIC COMPANY, GRAVER TANK & MFG. CORPORATION,

Petitioners,

v.

THE LINDE AIR PRODUCTS COMPANY,

Respondent.

BRIEF IN OPPOSITION TO PETITION FOR WRITS OF CERTIORARI.

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OPINIONS BELOW.

The opinion of the District Court (R. 907) is reported in 75 U. S. P. Q. 231.

The opinion of the Circuit Court of Appeals for the Seventh Circuit (R. 990) is reported in 167 F. 2d 531.

JURISDICTION.

Jurisdiction is invoked by petitioners under Section 240(a) of the Judicial Code, as amended by the Act of February 3, 1925, 28 U. S. C. § 347(a).

PRELIMINARY STATEMENT.

By a single Petition, application is made for two writs of certiorari (Nos. 184 and 185) in a patent case. The usual issues of validity and infringement are involved.

The Jones *et al.* Patent No. 2,043,960 in suit relates to a method or process of electric welding and to welding compositions.

There is presently no conflict of decisions among the Circuit Courts and the record affirmatively shows that the welding industry is distributed throughout the United States (R. 389-399).

All arguments on the merits which petitioners now make were fully briefed and argued by them, both before Judge Swygert in the District Court and before the Circuit Court of Appeals for the Seventh Circuit.

The Circuit Court approved Judge Swygert's finding on "clear and convincing" evidence that Jones *et al.* "invented an important improvement in electric welding • • • patentable over the prior art" (R. 907-8, 997). Both lower courts found that this invention makes possible welding speeds that "dwarf those of any other method" and produces welds "of the highest quality in contrast to the great amount of porosity contained in the welds produced by the so-called clay flux [or Robinoff] process" (R. 907-8, 997).

By concurrent findings it was also established that this outstanding invention was fully disclosed in the patent (R. 914, 1003-4) and copied by petitioners (R. 919-20, 925-27, 1002-4). The Trial Court required the petitioners to post a $300,000 bond pending appeal (R. 930).

These findings are supported by a voluminous record, necessarily highly technical. They relate to the chemical

and electrical behavior of prefused compositions under welding temperatures in the neighborhood of 6,000 degrees Fahrenheit. Such compositions are complex metallic silicates in which the constituent basic oxides are combined in binary and ternary combinations in approximately the stoichiometric proportions required to form a metasilicate, and having added a small proportion of a halide salt (Court of Appeals Opinion, R. 994).

The Misuse Issue.

Misuse of the patent in suit is the single issue that is not complicated by scientific technicalities. It affords a ready gauge to the quality of the other grounds on which petitioners rely.

Petitioners contend that respondent misused the patent by requiring unpatented welding rod to be bought as the condition of a license (Petition, pp. 15, 19; Brief, pp. 40-41).

Dispositive of this contention is the Trial Court's Finding No. 28 (R. 927), which the Circuit Court approved (R. 1003). It is:

> "Plaintiff does not impose as a condition of a license under the patent in suit, nor does plaintiff otherwise impose on its licensees, any requirement, condition, agreement or understanding as to the purchase or use of any goods, wares, merchandise, machinery, supplies or other commodities; and the licensees are free to buy and use any materials and equipment from any source."*

Petitioners offered no testimony on this issue. They were unable to find a single witness to testify that any con-

* Emphasis supplied throughout unless otherwise specifically stated.

dition, express or implied, was imposed. The Trial Court's finding is based on the testimony of respondent's vice-president, Mr. Cornwell, and the uncontested documentary record.

Judge Swygert did see, hear *and believe* Mr. Cornwell, who testified with respect to respondent's licensing policies, as follows (R. 403):

> "Q. Now, I ask you in connection with your license policy whether there is any provision with respect to the use of the welding material furnished by the Linde Company or sold by it at the present time?
>
> "The Witness: No."

The current form of license initiated about May, 1942, is Plaintiff's Exhibit 215, and the form in use at the time this action began is Plaintiff's Exhibit 216-S. Neither imposes any illegal condition.

Respondent's standard letters to prospective customers and to salesmen were also introduced (Defts'. Exs. 98 A-Y). Typical of their tenor is the following, to salesmen:

> "The rod purchase contract should not be presented or seriously discussed until after the license agreement forms have been presented to the prospective licensee, and when possible, the negotiation completed. • • • but regardless of who signs the contract, it should always be remembered that the source of rod is optional with the licensee and that the two agreements, though both related to the same finished weld are entirely independent." (Defts'. Ex. 98-C).

On this record the only possible conclusion is that expressed by the Trial Court in its opinion (R. 922):

"* * * it is hard to conceive what more plaintiff could have done to safeguard itself from charges of having unduly broadened its patent monopoly."

The Patent Law Issues.

Not one of the ten questions presented by petitioners on the patent issues (Petition, p. 16; see also Petitioner's Brief, pp. 22-23) merits the attention of this Court.

All four judges of both lower courts found that Jones *et al.* invented a novel welding process and compositions patentable over *all* prior art and that petitioners' Lincolnweld 660 flux is "identical in operation and result" with the Jones *et al.* compositions (R. 924, 926, 1002-3).

Both lower courts agreed, moreover, that claims 18, 20, 22, and 23 of the Jones *et al.* patent were valid and infringed (R. 928, 1003-4).

Nor are any important questions raised by the remaining claims in issue. The only difference between the District and Circuit Courts was in the construction of particular language.

1. The Circuit Court of Appeals, in upholding process claims 5, 6, and 11-17, properly construed the inventors' coined term "conductive melt," as the term was used in their patent, to mean their new welding compositions in vaporous form (R. 1000-1). The District Court had neglected this meaning of the term in holding such claims invalid (R. 915-16).

2. The Circuit Court of Appeals upheld the remaining claims in issue, and in so doing properly construed the composition claims (and reference to the welding composition in certain of the process claims) so as to limit them by the mandatory directions of the patent specifications with respect to

ingredients, proportions, preparation, and chemical and physical conditions (R. 998-99, 1001-2). The District Court's failure to apply the settled rule that claims should be thus limited had led it to hold such claims invalid (R. 915-16, 917-19).

No Questions of Public Interest Are Presented.

All issues of invention, anticipation, infringement, and misuse are settled by concurrent findings of the lower courts. Yet, such findings—as well as the particular wording of the patent in suit—are the bases for the Circuit Court's construction of the patent claims. Petitioners' own summary (Petition, p. 3) reveals that anticipation and infringement are the basic issues on which they seek review.

Such a controversy presents no questions having the general public interest which would warrant a grant of certiorari.

STATEMENT OF FACTS.

(To correct the Petition, pp. 3-15)

The *concurrent* and detailed findings of the District Court and the Circuit Court of Appeals on the patent issues establish that:

1. Jones *et al.* made an invention which was so "vastly" in advance of the prior art of electric welding as to "dwarf" all that had gone before. This invention was fully disclosed in the patent.

2. The novel features of the Jones *et al.* invention were validly claimed in the patent and were never abandoned.

3. The novel welding compositions invented by Jones *et al.* were deliberately appropriated by petitioners.

In large measure, the significant portions of these findings—the result of sifting a long and technical record—have nowhere been mentioned or explained by petitioners.

We shall discuss the record on the above three points in the stated order, pointing out items as to which petitioners are silent, and others as to which their statement is inconsistent with the record.

1.

Jones *et al.* Made an Invention of Great Merit Which Was Not Anticipated in the Prior Art.

It was determined explicitly by both the Trial Court and the Circuit Court of Appeals in this case that Jones *et al.* made a patentable invention of great value to industry. Petitioners have nowhere made this clear. As stated by the Circuit Court (R. 997):

> "The District Court said, and we think rightly, that Jones, Kennedy and Rotermund invented something patentable over the prior art of electric welding. He thought their method of welding differed vastly from electric-arc hand welding, either of the bare or coated rod variety, and that there was 'an inventive level difference' between their method and Robinoff's automatic welding method."

The District Court (R. 912-13) in reaching the same conclusion effectively disposed of Robinoff, whose process is so prominently featured by petitioners:

> "When considered on the level of the apparatus and the mechanical manipulations employed in the process, the Jones, et al. method is no different than that disclosed by Robinoff. Likewise, when considered from the standpoint of whether a new scientific principle or phenomenon is involved the Jones, et al method presents no new process. On the other hand, it does involve an arc phenomenon that is created in a different medium than that taught by Robinoff. It also involves an arc phenomenon that is encased in a mantle of molten flux as distinguished from the Robinoff method in which the arc is at best only partially sheathed in the clay flux. Accordingly, * * * a new process is involved in this invention."

The Trial Court also found as to the patented process versus Robinoff (R. 907-908):

> "In the Robinoff clay flux method constant flashings occur, and the arc is always at least partially visible. While in contrast * * * there is no glare, no open arc, no splatter, and very little, if any, smoke in the Jones, et al. method.
>
> " * * * and the welds produced by it [the Jones *et al.* method] are of the highest quality in contrast to the great amount of porosity contained in the welds produced by the so-called clay flux [Robinoff] process."

Petitioners' summary of the record, to the effect that Robinoff's clay-flux process had *the same submerged arc* as the Jones *et al.* process (*e.g.*, Petition, pp. 6, 8, 10; Brief, pp. 25-28) can well be evaluated in the light of these explicit findings of the Trial Court.

Typical of the record on this point is the fact that Robinoff himself wrote, shortly before he signed his patent application (Pltf.'s Ex. 222, R. 534):

> "* * * due to troubles encountered in producing a sound weld we abandoned the idea of submerging the electrode entirely under the flux* * *."

The sketch by which petitioners purport to illustrate the process of the Robinoff patent (Petition, p. 11), was prepared almost *two years prior* to the date of the letter in which Robinoff made the above statement (see Defts'. Ex. 108, R. 901). That sketch does *not* appear in the Robinoff patent (R. 973).

The foregoing facts give the true measure of petitioners' contention that the decision below operated to "withdraw from the public domain" the expired Robinoff patent* (Petition, p. 12; Brief, pp. 25-29).

Performance Capabilities: The concurrent findings of the lower courts on the performance achievements of the Jones *et al.* process are summarized in the opinion of the Circuit Court (R. 997) as follows:

> "'The truly remarkable difference, however, between what Jones, Kennedy and Rotermund invented and what had gone before is perhaps best manifested by the performance achievements of their invention. For instance, only through its use can plates as thick as two and one-half inches be welded in a single pass. Furthermore, the welding speeds made possible by

* We have omitted any detailed discussion of the J. C. Lincoln patent or process, although it, like Robinoff, is featured in petitioners' "Matter Involved" (Petition, pp. 3-15). Petitioners' own witnesses (Yeomans (R. 752) and Landis (R. 772-3)) admitted that the Lincoln process invariably involved a blazing open arc. By the time the trial was over, the Lincoln patent was so little regarded that it was not even referred to by the Trial Court in its opinion or findings—nor was it even mentioned by petitioners in the proposed findings rejected by the Trial Court which they included in their "Statement of Points," below (R. 939-940).

it dwarf those of any other method, and the welds produced by it are of the highest quality . . . .'"

This summary is based upon specific findings of the Trial Court, made after a month-long trial and after witnessing many demonstrations of welding (Finding No. 8, R. 924-5):

"The performance capabilities of the invention represented an important advance in the welding art. These capabilities include:

a. welding plates 2½ inches thick at a single pass;

[maxima for prior art processes were: ⅛" hand welding (R. 143, 177); ½" Robinoff (R. 540)]

b. employing electric currents of 3000 amperes and more;

[prior art maxima: 300-400 amps. hand welding (R. 177); 650-700 amps. Robinoff (R. 99, 540)]

c. attaining welding speeds of 120 inches or more per minute;

[10 to 20 times speed of any prior process (R. 187)]

d. producing welds of the highest quality."

[as compared with "great amount of porosity" contained in Robinoff welds (Trial Court, R. 907-8)]

Even James F. Lincoln, president of petitioner, The Lincoln Electric Company, on his cross-examination, was forced to admit this great advance in the art (R. 466).

Appearance of the Welding Operation: The blazing arc was a familiar feature of prior art welding. Its absence from the Jones *et al.* process was another criterion by which both lower courts distinguished the new process from the prior art—and which petitioners ignore. After witnessing numerous demonstrations, the District Court put it as follows (R. 907):

> "The physical appearances surrounding the welding zone in the Jones, et al method of welding differ from those in any of the prior methods of electric-arc welding. In bare rod and coated rod hand welding, the electric arc creates a blinding glare, and there is a great amount of smoke and splatter. In the Robinoff clay flux method constant flashings occur, and the arc is always at least partially visible. While in contrast to the appearances of those methods, there is no glare, no open arc, no splatter, and very little, if any, smoke in the Jones, et al. method."

The description of the accused *Lincolnweld process* in petitioner Lincoln's catalog also emphasizes these novel features (Pltf.'s Ex. 203, p. 4):

> "Absence of smoke, fumes, radiated heat, spatter and visible arc eliminates the discomforts of conventional open arc welding and results in an increased operating factor for lower welding costs."

Commercial Acceptance: The capabilities of the patented invention have gained it the endorsement of American industry (R. 389-393, 394-99):

> "Extensive commercial success has resulted from the exploitation of the invention by the plaintiff and its licensees. * * *" (Finding No. 9, R. 925).

The 750 licensees under the patent in suit include the leading American companies employing welding in a variety of fields—shipbuilders, pressure vessel fabricators, railroad equipment manufacturers, steel companies and general manufacturers. Even such leaders in the manufacture of electric welding equipment as the General Electric Company and the Westinghouse Company (R. 395-99) use the patented process in their own manufacturing operations.

Witnesses were called from a number of these licensees and the Trial Judge commented (R. 908):

> "• • • testimony by users of Unionmelt that the Jones, et al method permits faster welding, saves costs and constitutes a vast improvement over hand welding is highly convincing that the method under inquiry is an invention."

2.

The Novel Features of the Jones *et al.* Invention Were Validly Claimed in the Patent and Were Never Abandoned.

Origin of the Invention: The invention in suit was made jointly by three free-lance inventors—Jones, Kennedy and Rotermund. The inventors did their work at their own risk and expense without benefit of any highly organized research laboratory or large industrial corporation (R. 33).

The inventors were called upon for help by Western Pipe & Steel Company in May, 1932, because that company was experiencing a great deal of trouble in welding plate only ½" thick with the so-called "Robinoff" or clay flux process of welding. The welds being made contained a lot of "worm holes" or "porosity" (Pltf.'s Ex. 128, reproduced at R. 879-883).

Jones, Kennedy and Rotermund—who had ample qualifications for the task (R. 26-28, 133-137)—undertook in the first instance to correct this porosity (R. 32-33). They conducted experimental work during off hours at the South San Francisco plant of Western Pipe & Steel Company from May to November, 1932. They made some 500 welding tests and about 75 different compositions (R. 35).

It was the product of this research which was patented, and for which the inventors have received some $1,200,000 in royalties from respondent (R. 44).

Novel Mode of Operation of the Process—Validly Claimed and Never Abandoned: The novel mode of operation of the new welding process which was invented by Jones *et al.* (known commercially as "Unionmelt welding") cannot be described in terms of mere mechanical operating steps. As indicated in the patent itself (R. 955: *cf.* p. 1, col. 2, lines 23-30 with p. 3, col. 1, lines 45-51), they are the same as in the older Robinoff process. Per the Circuit Court (R. 998):

> "In both methods a deep layer of flux or welding composition is laid in the V formed by the beveled edges of the plates to be welded; a bare welding rod is fed down through this composition; and an electric current which produces the heat to weld the plates is conducted from the rod to the base metal."

The distinctive operation takes place deep in the welding zone. It is a combination of two unique features. First, throughout the welding operation, contact is maintained between the welding rod and a mantle or seal of fused welding composition which *entirely encloses* the welding zone. Thus, both lower courts found (R. 1002) that the Jones *et al.* process was novel.

> "in the sense that the electric arc between the electrode and base metal is sheathed by a mantle of welding composition * * *."

The Trial Court had further stated in its opinion (R. 911):

> "* * * the welding rod somewhere above its very end is in contact with, or rather is surrounded by, the pool of fused flux and * * * the arc zone, the vaporous ionized area between the end of the electrode and base metal, is sealed in by a sheath of molten flux in the form of a cap above the base metal * * *."

The disappearance of the old "open arc" or visible arc gives rise to the strikingly distinctive appearance of the Jones *et al.* process in operation, upon which both lower courts remarked (see p. 11, above). As the patent puts it (p. 4, col. 1, line 44), there is no "arc of the usual type." In fact, none at all can be observed, as the Trial Court noted (R. 909).

The second novel feature of the Jones *et al.* process is, by the concurrent findings of the lower courts (R. 1002):

> "* * * that the conductive arc area is composed predominantly of vaporous welding composition; * * *."

In developing this unique process, as the Circuit Court notes, the inventors proceeded contrary to the teachings of the prior art (R. 1002):

> "Plaintiff's process was quite different from that of the prior art disclosures in that the latter depended on the evolution of more gas to protect the molten metal, while plaintiff's proceeds on the theory of eliminating all gas forming ingredients."

The inventors taught how to *make* a mantle of fused material around the welding zone. Reversion to the teachings of the prior art would only show how to *break* it.

The Circuit Court in its opinion (R. 991-6) reviews the specification of the patent, which the Trial Court had further held (R. 914):

> "* * * contains a sufficient disclosure of the method of welding invented to enable persons 'skilled in the art' to accomplish the objective by following the teachings outlined in it."

Petitioners suggest in their statement of the facts, however, that the process is an "arc" process and that claims to any such process were abandoned (Petition, pp. 8-12; *cf.* Brief, pp. 26-8). They are flatly contradicted by the opinion of the Trial Court (R. 914), although they purport to rely upon its findings.* The Trial Court summarized its study of the file wrappers, as follows (R. 914):

> "That the initial idea of the inventors i.e., that they had an improved method of 'submerged' arc welding, was never completely abandoned is evident from both the patent and the applications for it. For example, the patent recites: 'Several circumstances show clearly that our process does not depend on the formation of an arc of the *usual* type.' (Emphasis supplied.) To like effect, the second application states:

* In making this argument, petitioners have also made a serious, although doubtless inadvertent, misstatement of the record. Referring to the inventors, petitioners state (Petition, p. 5):

> "They substitute, *so they say*, for the arc a *molten pool* of 'conductive melt * * * having appropriate electrical resistance properties' * * *." (Emphasis added.)

The words "molten pool" in this context are used only by petitioners. They do *not* appear in the patent, either to define or to qualify the term "conductive melt" (see R. 956, col. 1, lines 25-35, and context).

> "'Applicants' specification has been slightly amended where it discusses the theory of their process, and compares this process with prior arc processes. It is immaterial to the patentability of the invention whether applicants are able to give the correct theory or not, but it is their purpose to give the examiner the fullest information in their possession on this matter. It is difficult, if not impossible, to define an arc precisely, and applicants have contemplated the possibility that a definition may be framed in such terms as to embrace the phenomenon which occurs in their process. There can be no question, however, that there is no such arc involved in their process as occurs in every prior arc process, including that of Robinoff, et al.'".

Petitioners also call attention to statements in the second and third applications and in the patent to the effect that the electric welding current passes "by and through a *conductive melt* or welding composition" (Petition, p. 9) and that "The heat for melting the electrode is evidently developed in the *conductive melt* itself," (Petition, p. 9). They further suggest that this language evidences abandonment of an "arc" process (Petition; p. 9).

Petitioners thus interpret the record, without informing this Court that the Circuit Court specifically determined that the meaning of the term "conductive melt," as used in the patent (the term having been coined solely to describe the inventors' new welding composition when heated to welding temperatures), clearly included *such welding composition in its vaporous state*. Thus, the Circuit Court stated (R. 1000-1):

> "It is clear that in this respect the court should adopt the same interpretation of the term 'conductive

> melt' which the applicants reasonably expected it to have when they coined it. It is clear to us from its context in the patent, and the circumstances of its origin clearly indicate that the applicants intended the phrase to mean, when heated to welding temperatures, in either liquid or vaporous state.
>
> "This construction is quite consistent with the views expressed by experts of both plaintiff and defendants; with the Welding Handbook of the American Welding Society, and with Webster's New International Dictionary since 1936, which defines 'fluid' to mean 'liquid or gaseous.' The specification expressly states 'that the relatively high current densities which are preferably used superheat the molten metal and welding composition, making them highly fluid.' "

An "arc" is simply the scientific phenomenon of ionized conduction in a vaporous or gaseous medium, as the Trial Judge recognized (R. 911). It follows that where, as the Trial Court found, the arc is composed principally of vaporous welding composition, the patentees were scrupulously accurate when they stated that the current was conducted through, and the welding heat was developed in, the "conductive melt," *viz.*, the "vaporous welding composition."

The reason why the patentees avoided commitment upon whether the scientific phenomenon beneath the mantle sealing the welding zone from observation was an "arc," was noted, and approved, by the Circuit Court as follows (R. 1000):

> "The reason is that the applicants did not know, and they carefully avoided any commitment on that subject. There was no visible evidence of its presence, and for that reason it was impossible for them to

determine that scientific fact, nor was it incumbent upon them to do so. The file wrapper discloses that the applicants said to the Examiner:

> " 'It is difficult, if not impossible, to define an arc precisely, and applicants have contemplated the possibility that a definition may be framed in such terms as to embrace the phenomenon which occurs in their process.
>
> " 'There can be no question, however, that there is no such arc involved in their process as occurs in every prior art process including that of Robinoff, et al.' "

In their frank recognition that the existence of the arc phenomenon could not be determined with certainty by observation, the patentees were followed by the Trial Court which, after a month-long trial, stated (R. 909):

> "Because one cannot see what is actually happening beneath the top layer of the flux in the normal welding operation, it is impossible to say with complete certainty that there is or is not an arc."

Consequently, it is clear that the patentees limited themselves to describing and claiming their process in terms which did not go beyond the observable facts and which, besides, were accurate and consistent with the actual mode of operation of their process, as found by both lower courts.

3.

The Novel Welding Compositions Invented by Jones *et al.* Were Deliberately Appropriated by Petitioners.

Petitioners open their discussion of the facts relating to the welding compositions (Petition, p. 13) by misdescribing the invention as determined by both courts. Actually,

they are attacking the decision of the Trial Court (R. 917-921) affirmed by the Circuit Court (R. 1003-4) that claims 18, 20, 22, and 23 of the Jones *et al.* patent are valid and were infringed by petitioners.

Petitioners state as a fact that the sole flux composition invented by the patentees was the preferred calcium magnesium aluminum silicate disclosed in the patent specifications. Far from being a fact, this is the contention which they urged below, and which was rejected by both lower courts (R. 1003). Their statement is an obvious effort to avoid concurrent determinations of the lower courts that the accused calcium manganese aluminum silicate flux was disclosed by the patent and that this disclosure was appropriated by petitioners.

The Trial Court's findings (R. 925-27) were made after careful study of the patent and after hearing the testimony of experts in chemistry and metallurgy, and they are summarized in the Circuit Court's opinion (R. 1002-3) as follows:

> "The court found * * * that compositions of calcium, magnesium, strontium and barium, when prepared in accordance with the specification, are operative as welding compositions within the teachings of the patent; that these elements are known in chemical literature as alkaline earth metals; that manganese is not an alkaline earth metal; that manganese silicate is one of the nine metallic silicates which the specification discloses that the inventors have used as principal constituents in welding compositions attaining more or less effectively the objectives of their invention; that manganese silicate when used as a principal constituent of a welding composition, prepared according to the teachings of the patent, is a proper substitute for the silicates of the alkaline earth metals.

"The court further found that the defendants used and sold their accused composition since 1942, and are still using it, and it is substantially identical in operation and result with that of the patent; and that such flux is a calcium manganese aluminum silicate, with calcium fluoride added, which in welding operation is in all respects equivalent to the compositions of the patent; that a person skilled in the art can produce the accused flux of the defendants by following the teaching of the patent in suit; that no evidence was introduced to show that the accused flux was derived from the prior art or by independent experiment, or from any source other than the teaching of the patent in suit. It was further found that in the defendants' flux the slight excess of basic oxide over stoichiometric proportions does not substantially affect its operative character and it follows the teaching of the patent; that the patent teaches the substitution of manganese for other basic oxides and is not limited to the use of a moderate amount of manganese in addition to other basic oxides."

The petitioners baldly state that if the patent is interpreted to include their calcium manganese aluminum silicate it must be regarded as anticipated by Miller Patent No. 1,754,566. This is a contention pleaded in their answer and made before the Trial Court. That Court stated (R. 920-921):

"* * * that Miller patent did not teach all that the Jones, et al. patent does * * *.

* * *

Therefore, it cannot be said that the composition claims herein held valid are anticipated by the teachings of Miller."

The Trial Court's evaluation of the prior art is supported by the testimony of Lincoln's chief engineer who testified that not one of the hundreds of prior art fluxes previously used for electric arc welding could be successfully used in the Lincolnweld process (R. 770).

The petitioners also fix upon the phrase "more or less efficacious" in the specifications as suggesting that some of the nine metallic silicates specified in the patent are inoperative. The Trial Court also disposed of this contention, stating (R. 917):

> "Despite defendants' arguments concerning the proper meaning of the clause * * * a fair construction of it is that the invention includes compositions of those silicates mentioned and that the inventors found a number of them will accomplish the objectives of the patent more effectively than others of the group."

The Court's finding that all of these silicates would weld successfully is amply supported in the record. Mr. Kennedy, one of the inventors, testified (R. 128):

> "* * * this factor is common to all of them, that a conductive melt is formed; that when an electrode is in contact with this conductive melt, metal will be deposited which is sound and good."

ARGUMENT.

I. PETITIONERS HAVE SHOWN NO REASONS SUFFICIENT TO WARRANT ISSUANCE OF THE WRITS.

The true measure of this controversy is factual. Jones *et al.* made an invention of great merit and petitioners copied it. Now that this has been established by the con-

current findings of the lower courts, petitioners seek certiorari to have the basic issues of invention, anticipation and infringement retried by this Court.

Even the attacked rulings of the Circuit Court construing the patent in suit are founded upon the factual context of this invention and this patent. And, as we have shown (pp. 3-5, above), petitioners' issue of misuse is completely without foundation.

The case presented comes squarely within the ruling of this Court in *General Talking Pictures Corp.* v. *Western Electric Co.*, 304 U. S. 175, 178-179 (1938), where it was said:

> "Granting of the writ would not be warranted merely to review the evidence or inferences drawn from it. * * * Moreover, the decision on that point rests on concurrent findings. They are not to be disturbed unless plainly without support. * * * There is evidence to support them. Nor would the writ be granted to review the questions of anticipation and invention that petitioner argues, for as to them there is no conflict between decisions of circuit courts of appeals."

See also: *Continental Paper Bag Company* v. *Eastern Paper Bag Company*, 210 U. S. 405, 416 (1908).

The present controversy by its very nature, moreover, does not possess the public interest by which this Court has invariably conditioned its sparing exercise of the certiorari jurisdiction. This jurisdiction was granted, as stated by this Court in *Magnum Import Company, Inc.* v. *Coty*, 262 U. S. 159, 163 (1923):

> "* * * to bring up cases involving questions of importance which it is in the public interest to have decided by this Court of last resort. The jurisdiction was not conferred upon this Court merely to give the defeated party in the Circuit Court of Appeals another hearing."

Petitioners' issue of misuse (see pp. 3-5, above) furnishes a convenient, non-technical illustration of the total lack of consequence of the issues which petitioners advance under the banner of the public interest. All of their patent law issues likewise reduce, upon examination, to mere factual disputes or narrow points of construction having no interest beyond the boundaries of this case. The very number of the questions on which they seek review shows that they have confused the public interest with their own.

The controversy is not even of paramount importance to petitioners, since James F. Lincoln, president of petitioner Lincoln, when cross-examined as to the effect of Unionmelt welding upon his company's business, answered (R. 467): "Infinitesimal."

II. POINT-BY-POINT REFUTATION OF REASONS RELIED ON BY PETITIONERS.

1.

Refutation of Petitioners' First Reason (Petitioners' Brief, pp. 24-25): There Is No Conflict in Circuit Court Decisions and No Exceptional Basis for Certiorari.

As a general rule, this Court will not grant certiorari to review a patent case unless there is a conflict in the decisions of Circuit Courts of Appeals. No such conflict exists in this case. Petitioners argue, however, that the circum-

stances of this case bring it within a limited, and rarely implemented, exception.'

As shown by petitioners' own quotation from *Mackay Radio & Telegraph Co.* v. *Radio Corporation of America*, 306 U. S. 86 (1939) (Petitioners' Brief, p. 25), the prerequisites of this exception are that:

1. The questions presented must be of real importance to the public, as distinguished from the parties.
2. Validity and infringement of the patent must be doubtful.
3. Future litigation in other circuits must be improbable.

None of these prerequisites has been established by petitioners.

Lack of Public Importance: We have already demonstrated the total lack of public importance of the misuse and other issues which petitioners seek to raise (see pp. 21-23, above). The following sections of this brief, refuting point-by-point petitioners' arguments on the patent issues, further expose the inconsequential nature of their contentions (see p. 26 *et seq.*, below). Thus, the primary reason given for granting the writ in the *Mackay Radio & Telegraph Co.* case is lacking in the present case.

Validity and Infringement of the Patent Are Not Doubtful: In No. 185, petitioners seek certiorari as to the composition claims of the Jones *et al.* patent which were unanimously held valid and infringed by all four judges of the two courts which have passed upon them. The Trial Court

evidenced no "doubt" when it set petitioners' bond at $300,000.

As respects No. 184, both lower courts were agreed upon the primary issues of invention and non-anticipation which petitioners urge.

Lack of doubt as to the validity of this patent is confirmed by the fact (referred to in Petitioners' Brief, p. 24) that there are 750 licensees under the Jones *et al.* process.

Litigation in Other Circuits Is Not Improbable: Petitioners contend that the possibility of future litigation is remote (Petitioners' Brief, p. 24), but the cases on which they rely, with one exception, involved concentration in a single circuit of the entire industry to which the patent related. The industry in the *Mackay Radio & Telegraph Co.* case was "the business of world wide public radio communication" (see 306 U. S. at p. 89), in which petitioner was respondent's sole competitor.

These cases have no application to the entirely different situation existing in the present case. No such concentration of the welding industry—geographic or otherwise—is established by petitioners' record citations (Petitioners' Brief, p. 24) to the effect that (a) respondent obtained a consent decree against a user of its invention shortly after the patent issued, and (b) there are 750 licensees.

On the contrary, the record affirmatively shows both that the welding industry is distributed throughout the United States (*e.g.*, R. 385-411), and that it is highly competitive (R. 408). The proof is detailed enough to establish that industrial use of submerged arc welding likewise is national in scope (R. 385-411).

Such companies as Bethlehem Steel, International Harvester, and the General Electric and Westinghouse Com-

panies—presently included among the 750 licensees (R. 398)—are not without means either to compete or to defend themselves if they deem a charge of infringement unjust.

2.

Refutation of Petitioners' Second Reason (Petitioners' Brief, pp. 25-35): No Important Patent Questions Have Been Decided Contrary to This Court's Decisions.

The issues upon which petitioners seek certiorari are those of validity and infringement. Petitioners' first point (Petitioners' Brief, pp. 25-29) combines and repeats arguments, rejected by both lower courts, to the effect that the Jones *et al.* patent was either anticipated in the prior art or is invalid by reason of Patent Office estoppel.

Petitioners' arguments are based upon a faulty reading of the record and they have necessarily been answered in our "Statement of Facts;" where it is shown that:

1. The novel process invented by Jones *et al.* was validly claimed and never abandoned—pp. 13-18, above.

2. The coined term "conductive melt," as used in the patent, accurately describes the invention which both lower courts held to have been made by Jones *et al.*—pp. 16-17, above.

The Trial Court and the Circuit Court agreed that petitioners' Lincolnweld 660 flux infringes composition claims 18, 20, 22, and 23 of the patent in suit. Petitioners' second point (Petitioners' Brief, pp. 29-33) consists of an attack on this concurrent determination upon the ground that the word "manganese" does not appear in the claims, although

it is used in the specifications. They have overlooked the obvious fact that these claims did not relate to chemicals, as such, but to *welding compositions.*

The fallacy of petitioners' argument is exposed in the Trial Court's findings, reviewed at pages 19-20, above.

It appears from such findings that far from enlarging the claims by resort to the specifications, the lower courts specifically *limited them* by the mandatory directions therein contained with respect to ingredients, proportions, preparation, and chemical and physical conditions. The claims, as thus limited, were found to read directly upon petitioners' Lincolnweld 660 flux.

Petitioners' ancillary contentions (Petitioners' Brief, pp. 30-33) that the claims as construed below would revive the Miller patent and would include inoperable compounds have also been answered above (pp. 20-21).*

Petitioners' next argument (Petitioners' Brief, p. 33) is another repetition of their insistence that Jones *et al.* was anticipated by Robinoff and Miller. It has already been answered by the District Court (R. 907, 920-1), by the Circuit Court (R. 997, 1003), and by respondent (pp. 7-12, 20-21, above).

Petitioners' contention (Petitioners' Brief, pp. 34-35, reasserted at p. 5.) that the effect of the Circuit Court's

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* Neither lower court found it necessary—in view of the record—to deal specifically with the Robinoff clay flux upon which petitioners also rely. The Robinoff *patent* failed to identify any flux (R. 973-7). The clay flux Robinoff used is correctly described at page 1 of the patent in suit (R. 955). It is only a *mechanical mixture* of ingredients, as distinguished from the *prefused compositions* in suit. As the Trial Court found (Finding No. 6, R. 924):

> "The clay flux composition used with the Robinoff process * * * evolved a large volume of gas during welding. Jones et al * * * determined they would avoid the evolution of gas * * * by prefusing * * *."

reading of the claims is to grant a patent upon a result, is a play upon words. The unique *operational* characteristics of the Jones *et al.* process are called *results.*

The Circuit Court in its opinion distinguished clearly between the new mode of operation of the Jones *et al.* process and its capabilities or results. No better answer to petitioners' point can be made than is to be found in the following portions of its opinion (R. 1002):

> "Plaintiff's process was quite different from that of the prior art disclosures in that the latter depended on the evolution of more gas to protect the molten metal, while plaintiff's proceeds on the theory of eliminating all gas forming ingredients. That difference is clearly one of process. True, plaintiff's process contemplated and depended upon a different composition of flux, and the patent was issued on both process and flux composition, and we think rightly so. There are as many different kinds of flux as there are elements and combinations of elements, and when thus used their results are quite as numerous. However, this patent was not granted upon a result, but it was granted upon a process or method which produced a much desired result, and which was then unknown to the art. Any other process or method which produces the same result would not infringe this process patent, provided it does not use this method or its equivalent, and this would be true regardless of what flux, if any, was used for such purpose."

Moreover, the fact that the welding zone is *composed of vaporous welding composition, or "conductive melt,"* was both disclosed in the specifications and covered by the claims (see pp. 16-17, above).

It follows that the inventors complied precisely with the statute (35 U. S. C. §33) and did "particularly point out and distinctly claim" the novel feature of their invention.

3.

Refutation of Petitioners' Third Reason (Petitioners' Brief, pp. 35-41): No Important Questions, Not Heretofore Settled, Are Raised.

Petitioners first complain of the decision of the Circuit Court of Appeals with respect to six process claims which identify the welding composition to be used in achieving the unique operational method of the process by its critical physical qualities rather than by chemical constituents (Petitioners' Brief, pp. 36-38).

The language of the specifications is such as to render construction of the patent unreasonable without consideration of the limiting language there contained. Among other things, five *musts* are enumerated in such peremptory language as to amount to a disclaimer of all compositions which do not conform to their requirements (see Circuit Court Opinion, R. 993). Such mandatory directions cannot be disregarded though not separately stated in the claims.

See, *e. g.*, *Smith* v. *Snow*, 294 U. S. 1, 11 (1935).

The Circuit Court of Appeals properly held (R. 999) that these claims sufficiently identified the welding composition to be used in the process under 35 U. S. C. §33.

Petitioners also object to the Circuit Court's construction of process claim 2 and composition claims 24 and 26 (Petitioners' Brief, pp. 38-40). As stated by the Circuit Court, in upholding these claims (R. 1001-2):

> "It is only when these claims last referred to are read alone, without regard to the rest of the patent, that the terms 'silicates' and 'metallic silicates' can be construed as meaning all 'silicates' or all 'metallic silicates.' It seems clear to us that when the patent is read as a whole it is quite plain that these terms refer to the three outlined earth silicates plus the six other metallic silicates listed in the specifications as their equivalents. We think the court should have held valid the process claim 2 and composition claims 24, 26 and 27."

In *Aluminum Co. of America* v. *Thompson Products, Inc.*, 122 F. 2d 796, 798 (C. C. A. 6th 1941), upon which petitioners rely (Petitioners' Brief, p. 39), what was actually decided was that:

> "'* * * a claim which is capable both of broad and narrow construction in the light of the specification will be given that construction which sustains the patent, but * * * 'where, from the specification or the history of the application or the language of the claim it is clear that the patentee intended to claim and the Patent Office intended to grant the broader monopoly which turns out to be invalid, the courts will not, for the arbitrary purpose of saving the claim, read into it a limitation which it does not have.' [209 F. 213.]"

The Circuit Court correctly distinguished the *Aluminum Co.* case by the entirely different import of the record in the present case, stating (R. 1001):

> "We fully agree with what is there said. However, there is nothing in this record to support the fact that the applicants for this patent intended by these claims to assert any monopoly broader than nine

metallic silicates named in the specifications. Under these circumstances, we think the court should have applied the general rule as laid down in the case just referred to and followed the construction which would sustain them."

Petitioners' assertion (Petitioner's Brief, p. 39) that the nine metallic silicates listed in the specifications had not proved operative, quarrels with the concurrent findings of both lower courts (see p. 21, above).

4.

Refutation of Petitioners' Fourth Reason (Petitioners' Brief, pp. 42-43): The Circuit Court Has Not Departed From the Accepted Course of Judicial Proceedings.

In the preceding sections of this brief, and particularly in our Statement of Facts (pp. 7-12, above), we have demonstrated that the concurrent findings of the District and Circuit Courts have established the Jones *et al.* invention as patentable over the prior art. It follows that the Circuit Court did not take the liberties with the findings of the District Court of which petitioners accuse it.

Petitioners' contentions respecting conclusions of law are as follows (Petitioners' Brief, p. 43):

> "As for the conclusions of law, if the court wrongfully characterized them as fact findings, petitioners would not be hurt were the result clearly right. Nor would the public interest suffer by a legal decision correctly rendered, albeit under misapprehension. This is not that case. The court's legal conclusions are wrong; if not, at the least they are debatable."

Even though these contentions could be established—and they cannot—we are aware of no decision granting the writ of certiorari on such a ground.

Conclusion.

The writs should not issue.

Respectfully submitted,

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